

# LOCAL WORKFORCE DEVELOPMENT AREA 4 CITY OF DULUTH

*Covers:  
City of Duluth*

## 2019 REGIONAL PROFILE

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## DEMOGRAPHICS

### POPULATION CHANGE

Local Workforce Development Area 4 (WDB 4) consists of the city of Duluth. According to population data from the [U.S. Census Bureau](#), Duluth was home to 85,884 people in 2019, accounting for 1.5% of the state’s total population. The city of Duluth has lost 381 residents since 2010 and 182 over the past year, equal to decreases of 0.4% and 0.2% respectively. Meanwhile, the state of Minnesota has grown by 5.8% with an increase of 335,707 people (Table 1).

	2010 Population	2019 Estimates	2010-2019 Change	
			Number	Percent
<b>WDB 4 – Duluth</b>	<b>86,265</b>	<b>85,884</b>	<b>-381</b>	<b>-0.4%</b>
Northeast Minnesota	326,225	324,290	-1,935	-0.6%
Aitkin Co.	16,202	15,886	-316	-2.0%
Carlton Co.	35,386	35,871	+485	+1.4%
Cook Co.	5,176	5,463	+287	+5.5%
Itasca Co.	45,058	45,130	+72	+0.2%
Koochiching Co.	13,311	12,229	-1,082	-8.1%
Lake Co.	10,866	10,641	-225	-2.1%
St. Louis Co.	200,226	199,070	-1,156	-0.6%
<b>State of Minnesota</b>	<b>5,303,925</b>	<b>5,639,632</b>	<b>+335,707</b>	<b>+6.3%</b>

Source: [U.S. Census Bureau, Population Estimates](#)

Still, the city of Duluth is the 5th largest city in the state, behind only Minneapolis, St. Paul, and Rochester, and Bloomington according to the State Demographic Center. It is the principal city in the Duluth-Superior MN-WI Metropolitan Statistical Area (MSA), which includes St. Louis and Carlton County in Minnesota and Douglas County in Wisconsin. Duluth and St. Louis County are the largest city and county in the region, and the city accounts for 26.5% of the Northeast planning region.

### COMPONENTS OF POPULATION CHANGE

The recent population decrease in Local Area 4 – Duluth was fueled primarily by a natural decrease – more deaths than births equaling -773 people from 2010 to 2019. These decreases were supplemented by domestic out-migration during that time, when 105 more people moved out of the city than in. However, the population decrease would have been even greater if not for a gain of 447 new foreign-born immigrants to the region since 2010 (Table 2).

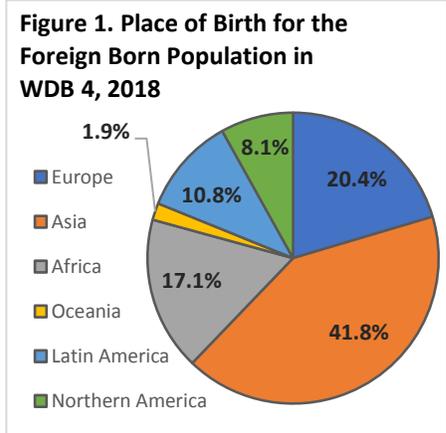
	Total Change	Natural Increase	Vital Events		Net Migration		
			Births	Deaths	Total	International	Domestic
WDB 4-Duluth	-512	-773	+7,872	+8,645	+342	+447	-105
Minnesota	+335,705	+250,488	+637,356	+386,868	+88,161	+114,414	-26,253

Source: [U.S. Census Bureau, Population Estimates Program](#)

With the in-migration, Northeast Minnesota was now home to 2,921 foreign-born residents, or 3.4% of the total

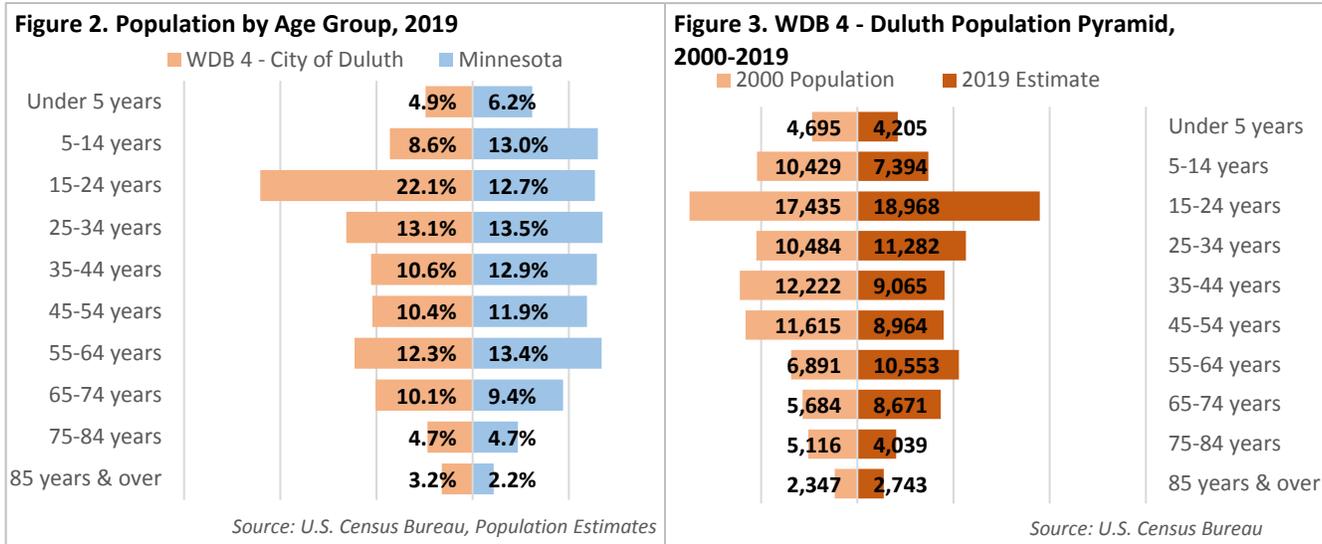
population. The largest number of immigrants in the region came from Eastern or South-Central Asia, Eastern Europe, Eastern Africa, and Latin America (Figure 1). However, the fastest increase in immigrants came from Africa, which nearly doubled since 2010.

Based on year of entry, Duluth’s foreign-born population was more recent than the rest of the state. About 31% of the region’s immigrants entered the U.S. in 2010 or later, compared to just 21.5% statewide. However, the region had a similar percentage of foreign-born residents who had entered before 1990 as the state. Foreign-born residents have a younger age profile than the native-born population, with 26.1% being between 15 and 24 years of age, compared to 23.1% of the total population. While a higher percentage of foreign-born residents had a bachelor’s degree or higher than native born residents, immigrants were also much more likely to have less than a high school diploma.



### POPULATION BY AGE GROUP

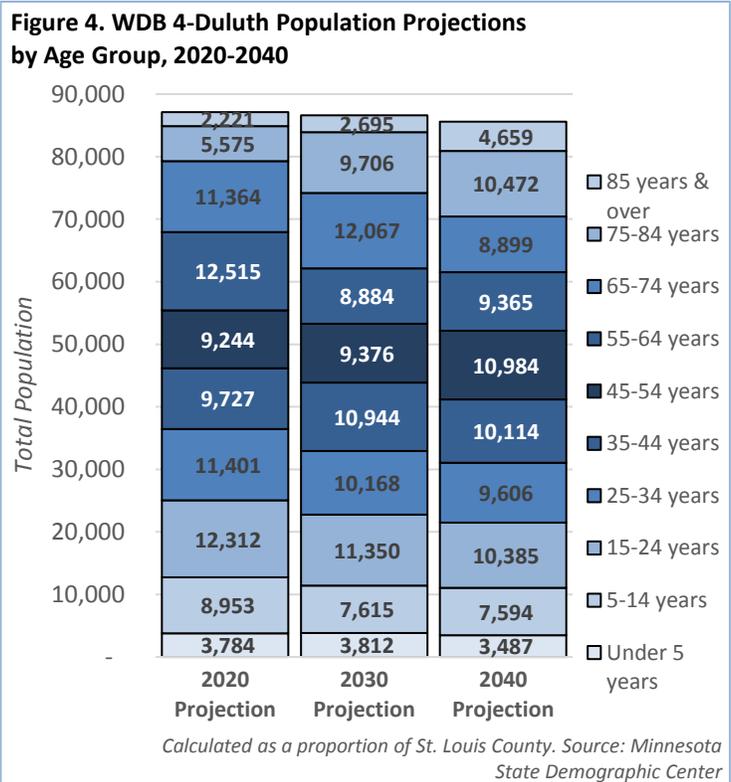
Due to the large college-aged population, Local Area 4 has a much different demographic composition than the rest of Northeast Minnesota and the state. Only 30.3% of the population in Duluth is 55 years of age or older, compared to 39.4% of the population in the rest of Northeast Minnesota. In contrast, Local Area 4 has 22.1% of its population between the ages of 15 and 24, reflecting the colleges in the city. Local Area 4 had fewer people in the 25 to 54-year-old age group, which is typically considered the “prime working years”. While the number of younger and middle-aged residents was declining, the number of residents aged 55 years and over was rapidly increasing (Figure 2 and 3).



### POPULATION PROJECTIONS BY AGE GROUP

Local Area 4 is projected to see population stability in the next 20 years. According to population projections from the [State Demographic Center](#), the city is expected to lose just over 1,500 residents from 2020 to 2040, a -1.8% decline (Figure 4). In comparison, the state of Minnesota is projected to grow 8.8% from 2020 to 2040, closing in on 6.2 million residents.

However, Duluth is expected to add nearly 7,335 people aged 75 years and over, a 94% jump. The city is also projected to see a small but notable gain in the 35- to 54-year-old age group. In contrast, the region is expected to have fewer school-aged children and young adults, as well as people from 55 to 74 years as the current Baby Boom generation moves through the population pyramid.



### POPULATION BY RACE

Local Area 4’s population is less diverse than the state’s, but is becoming more diverse over time. In 2018, about 90% of the region’s residents reported White alone as their race, compared to 83.3% of residents statewide. The region had much smaller percentages of Black or African American residents, Asian or Other Pacific Islanders, and people of Hispanic or Latino origin. However, at 1.8, Duluth had a higher percentage of people reporting as American Indian or Alaska Native than the state, and also a greater percentage of people of Two or More Races (Table 3).

Table 3. Race and Hispanic Origin, 2018	WDB 4 - Duluth			Minnesota	
	Number	Percent	Change from 2000-2018	Percent	Change from 2000-2018
<b>Total</b>	<b>86,004</b>	<b>100.0%</b>	<b>-914</b>	<b>100.0%</b>	<b>+12.4%</b>
White	77,255	89.8%	-3,277	83.3%	+4.7%
Black or African American	2,083	2.4%	+668	6.2%	+99.3%
American Indian & Alaska Native	1,550	1.8%	-572	1.1%	+7.3%
Asian & Other Pacific Islander	1,435	1.7%	+417	4.8%	+83.8%
Some Other Race	348	0.4%	+97	1.8%	+48.7%
Two or More Races	3,333	3.9%	+1,753	2.9%	+90.7%
Hispanic or Latino	1,981	2.3%	+1,060	5.3%	+104.2%

*Source: 2014-2018 American Community Survey, 5-year estimates*

In Duluth, the Black or African American population increased by 668 people since 2000 while the population reporting Two or More Races rose by 1,753 people. The Two or More Races and Hispanic and Latino populations grew the fastest, both more than doubling since 2000.

### EDUCATIONAL ATTAINMENT

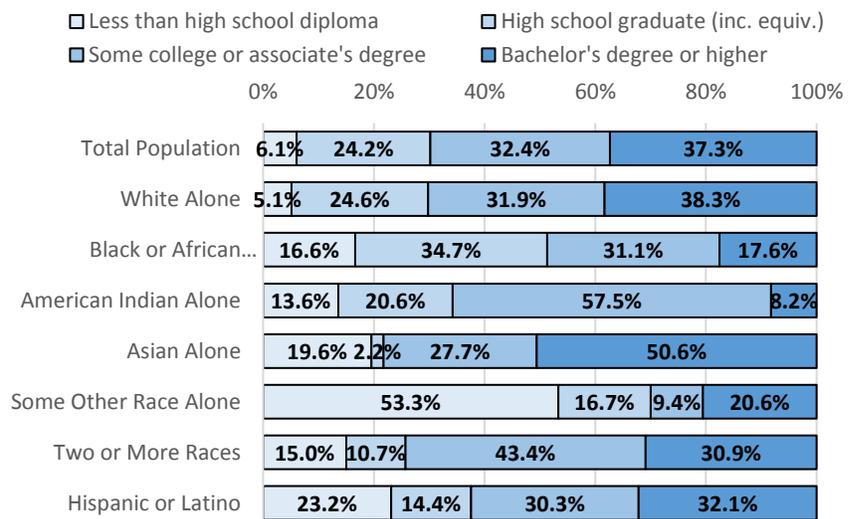
With 39.9% of adults aged 18 years and over holding a college degree, Local Area 4 has similar educational attainment than the state in 2017, where 43.7% of adults have an associate, bachelor’s, or advanced degree. The area had a higher percentage of people with some college but no degree, and a slightly lower percentage of people with associate’s degrees and a high school diploma or less (Table 4).

Table 4. Educational Attainment for the Adult Population, 2018	WDB 4 - Duluth		Minnesota
	Number	Percent	Percent
<b>Total, 18 years &amp; over</b>	70,526	100.0%	100.0%
Less than high school	4,136	5.9%	7.6%
High school grad. (incl. equiv.)	15,717	22.3%	25.3%
Some college, no degree	22,568	32.0%	23.4%
Associate's degree	6,100	8.6%	10.8%
Bachelor's degree	14,500	20.6%	22.1%
Advanced degree	7,505	10.6%	10.7%

*Source: U.S. Census Bureau, 2014-2018 American Community Survey*

Educational attainment varies significantly by race and ethnicity in Local Area 4. At least 15% of every group of color except American Indians had less than a high school diploma. This is compared to just 5.1% of White residents. However, over 43% of American Indians and people of Two or More Races attended some college or earned an associate’s degree, and 51% of Asian residents had a bachelor’s degree or higher, which was the greatest share of any group (Figure 5).

**Figure 12. WDB 4 - Duluth Educational Attainment for the population aged 25 years & over by Race or Origin, 2018**



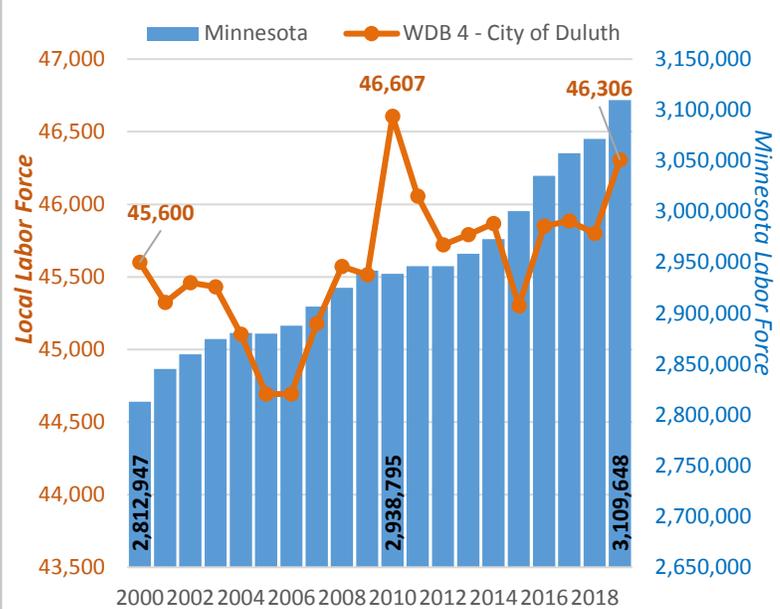
*Source: 2014-2018 American Community Survey*

## LABOR FORCE

### LABOR FORCE CHANGE

According to data from DEED’s [Local Area Unemployment Statistics](#) program, Local Area 4 had 46,306 workers in 2019. In the depths of the recession in 2010, the city’s labor force reached its peak with about 46,607 workers but has steadily declined as the recovery from the recession has taken hold. Along with population stability for the local area, the city’s labor force has stayed relatively stable, with a modest increase in the number of workers since 2000. (Figure 6). In contrast, the state was steadily gaining workers over the past decade and a half (Figure 6). As the economy recovered from the Great Recession, the labor market in the region tightened, with under 1,500 unemployed workers in 2019, before the coronavirus pandemic hit.

Figure 6. Annual Labor Force Estimates, 2000-2019

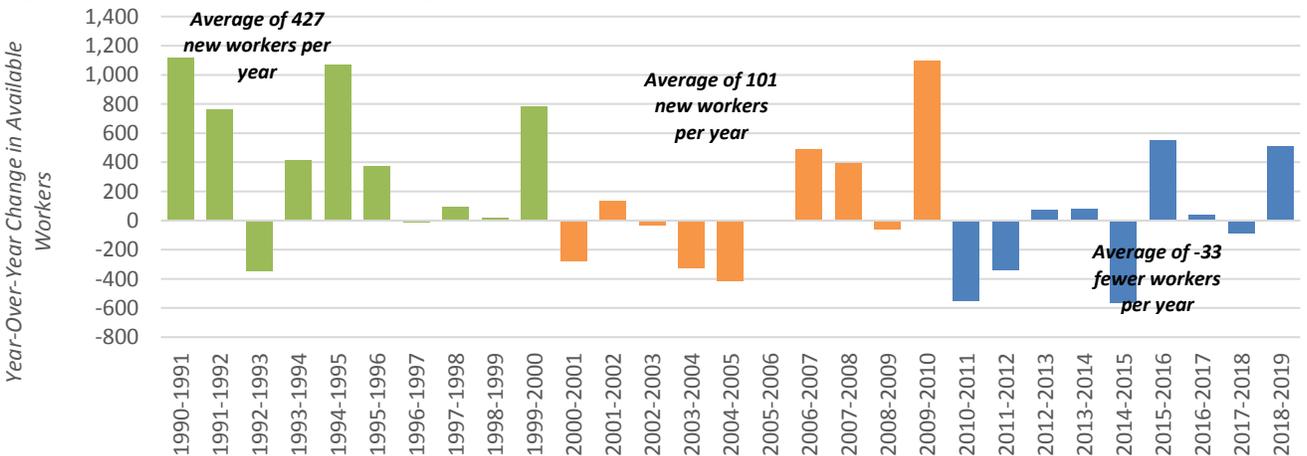


Source: DEED Local Area Unemployment Statistics (LAUS) program

After averaging a net gain of about 425 additional labor force participants per year between 1990 and 2000, Local Area 4 employers were able to tap into a large and growing pool of talented workers. However, from 2010 to 2019, the city’s labor force started to shrink, losing about 300 workers so far this decade. The area peaked with 46,607 available workers in 2010, but has since averaged a loss of 33 workers per year (Figure 7).

Increasingly tight labor markets and a growing scarcity of workers is now recognized as one of Local Area 4’s most significant barriers to future economic growth. In the face of these constraints, it has become evident that a more diverse workforce in terms of age, gender, race, ethnicity, disability status, and immigration has been and will continue to be a vital source of the workers that employers need to succeed. As the White, native-born workforce continues to age, younger workers of different races or from different countries will comprise the fastest growing segment of the labor force.

Figure 7. WDB 4 - Duluth Annual Change in Labor Force, 1990-2019



Source: DEED Local Area Unemployment Statistics (LAUS)

**LABOR FORCE PROJECTIONS**

If Local Area 4’s population changes at the projected rates shown in Figure 4 above, the area would be expected to see a decline in the labor force over the next decade. Applying current labor force participation rates to future population projections by age group creates labor force projections for the city, which show a steady 5.7% drop in workforce numbers. In addition to the overall decline, the labor force will also see a significant shift over time, with gains in the number of workers aged 65 years and over against huge declines in the number of workers aged 55 to 64 years. The region is also expected to lose teenaged workers and entry-level workers in the next decade. However, the region is expected to see gains in the number of 45 to 54 year olds. These long-term declines project the exacerbation of an already tight labor market, with employers needing to respond to the changing labor force availability in the area (Table 5).

**Table 5. WDB 4 - Duluth Labor Force Projections**

	2020 Labor Force Projection	2030 Labor Force Projection	2020-2030 Change	
			Numeric	Percent
16 to 19 years	2,509	2,305	-204	-8.1%
20 to 24 years	5,568	5,146	-422	-7.6%
25 to 44 years	18,589	18,575	-14	-0.1%
45 to 54 years	7,562	7,670	+108	+1.4%
55 to 64 years	8,298	5,890	-2,408	-29.0%
65 to 74 years	2,625	2,787	+162	+6.2%
75 years & over	343	546	+203	+59.1%
<b>Total Labor Force</b>	<b>45,493</b>	<b>42,919</b>	<b>-2,575</b>	<b>-5.7%</b>

*Source: calculated from Minnesota State Demographic Center population projections and 2014-2018 American Community Survey 5-Year Estimates*

**EMPLOYMENT CHARACTERISTICS**

With just 66.2% of the population over 16 years of age in the labor force, Local Area 4 had a lower labor force participation rate than the state. In addition, every age group, except for 16-19 year olds, had lower labor force participation rates than those statewide, especially for those 45 and older (Table 6).

The region had lower participation rates than the state for every race and ethnicity group; and had large unemployment rate disparities for people of color. Unemployment rates for American Indian and Two or More Races workers were more than double the rate for Whites. The average unemployment rate for all workers of color was 8.5%, more than double that of White workers.

The city also had 1,847 veterans and 2,860 workers with disabilities in the labor force, with both having lower participation rates than the state. Unemployment rates were highest for youth, workers of color, and workers with disabilities (Table 6).

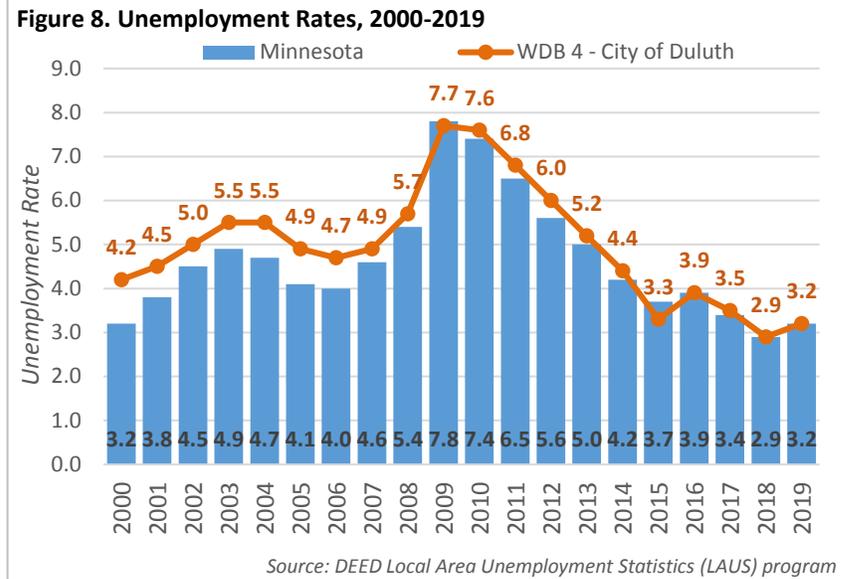
**Table 6. WDB 4 - Duluth Employment Characteristics, 2018**

Age Group	WDB 4- Duluth			Minnesota	
	Labor Force	Labor Force Partic. Rate	Unemp. Rate	Labor Force Partic. Rate	Unemp. Rate
<b>Total Labor Force</b>	47,813	66.2%	4.4%	69.7%	3.9%
16 to 19 years	3,886	58.4%	12.6%	52.9%	11.7%
20 to 24 years	9,586	80.2%	4.9%	84.4%	6.4%
25 to 44 years	18,177	88.0%	3.5%	88.6%	3.5%
45 to 54 years	7,394	81.8%	4.5%	87.3%	2.8%
55 to 64 years	6,806	66.3%	1.8%	72.6%	3.0%
65 to 74 years	1,692	23.1%	3.5%	27.6%	2.4%
75 years & over	279	4.4%	5.8%	6.3%	2.6%
<b>Employment Characteristics by Gender</b>					
Male	24,189	68.2%	5.2%	73.5%	4.3%
Female	23,626	64.3%	3.7%	66.0%	3.4%
<b>Employment Characteristics by Race &amp; Hispanic Origin</b>					
White alone	44,179	66.9%	4.1%	69.5%	3.3%
Black or African American	867	54.2%	7.0%	70.7%	9.9%
American Indian & Alaska Native	668	54.9%	12.3%	58.5%	12.8%
Asian or Other Pacific Islanders	754	58.4%	7.6%	71.3%	4.7%
Some Other Race	166	73.5%	n/a	77.2%	6.2%
Two or More Races	1,200	64.7%	10.1%	73.1%	7.6%
Hispanic or Latino	911	69.1%	6.0%	76.3%	6.5%
<b>Employment Characteristics by Veteran Status</b>					
Veterans, 18 to 64 years	1,847	72.3%	6.0%	79.2%	4.2%
<b>Employment Characteristics by Disability</b>					
With Any Disability	2,860	46.8%	8.6%	52.5%	9.0%
<b>Employment Characteristics by Educational Attainment</b>					
Population 25 to 64 years	32,371	81.0%	3.4%	84.2%	3.2%
Less than H.S. Diploma	1,062	55.0%	5.3%	65.4%	4.5%
H.S. Diploma or Equivalent	6,036	72.2%	2.2%	78.6%	2.6%
Some College or Assoc. Degree	11,154	79.8%	3.7%	85.2%	3.2%
Bachelor's Degree or Higher	14,110	89.9%	1.7%	89.8%	1.9%

*Source: 2014-2018 American Community Survey, 5-Year Estimates*

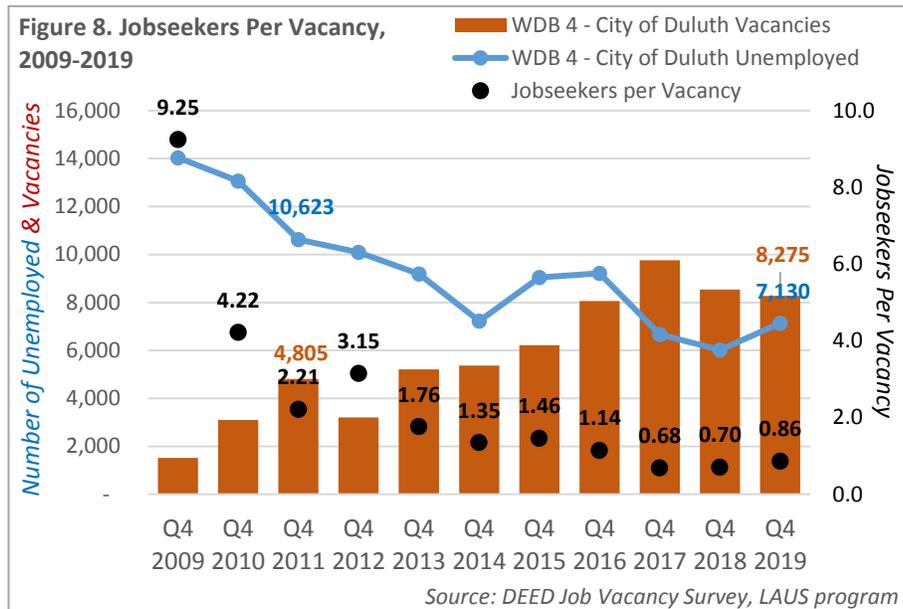
### UNEMPLOYMENT RATES

Local Area 3 has similar unemployment rates to Minnesota, and much lower rates than the Northeast region as a whole. According to [Local Area Unemployment Statistics](#), the city's unemployment rate reached its peak in 2009 at 7.7%, then steadily declined to an annual rate of 3.3% in 2015 before increasing again. Since then, the unemployment rate dropped to 2.9% in 2018 and increased only slightly to 3.2% in 2019 as tight labor market conditions continued in the city (Figure 8).



### JOBSEEKERS PER VACANCY

Another clear demonstration of the tightening labor market conditions in Local Area 4 is the ratio of unemployed jobseekers per vacancy, which stood at 0.86-to-1 at the end of 2019. According to recent job vacancy survey results, there were 8,275 openings reported by employers compared to 7,130 unemployed jobseekers in Northeast Minnesota. The ratio climbed as high as 9.25 during the recession in 2009 and has grown slightly since 2017 (Figure 9).



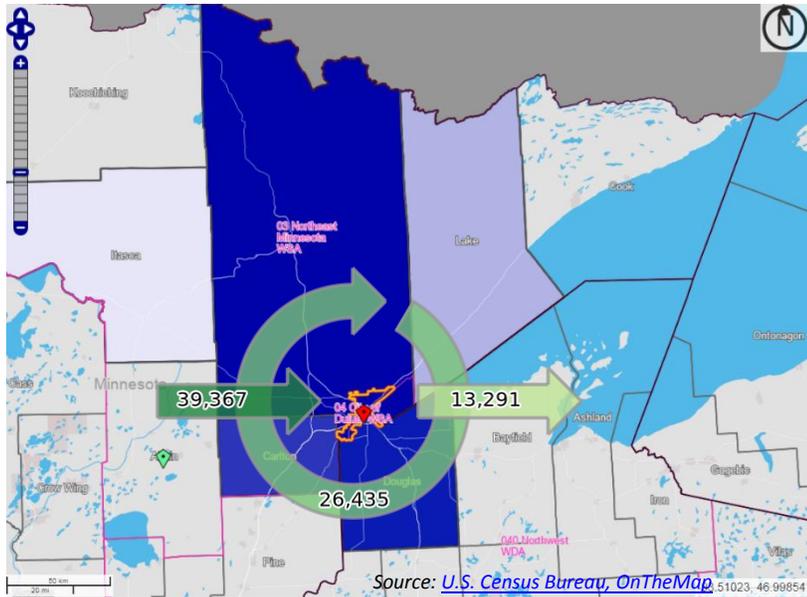
### COMMUTE SHED AND LABOR SHED

According to commuting data from the U.S. Census Bureau, the city of Duluth is a net importer of labor, having more jobs than available workers; drawing in workers from surrounding cities and counties. In sum, 26,435 workers both lived and worked in the city, while another 39,367 workers drove into the city for work, compared to 13,291 who live in the city but drove to surrounding cities or counties for work. About 67% of workers who live in Duluth also work within the city (Table 7, Figure 10).

Table 7. WDB 4 – City of Duluth Inflow/Outflow Job Counts (All Jobs), 2017	2017	
	Count	Share
Employed in the Selection Area	65,802	100.0%
Employed in the Selection Area but Living Outside	39,367	59.8%
Employed and Living in the Selection Area	26,435	40.2%
Living in the Selection Area	39,726	100.0%
Living in the Selection Area but Employed Outside	13,291	33.5%
Living and Employed in the Selection Area	26,435	66.5%

Source: U.S. Census Bureau, OnTheMap

Figure 10. WDB 4-City of Duluth Labor and Commute Shed, 2017



In the Northeast region, Duluth and St. Louis County are the largest employment providers in the area and are the biggest draw for workers, followed by Itasca, Carlton, Koochiching, Lake, and Cook counties. Employers in the city draw workers from Douglas County in Wisconsin, Carlton County, and even Hennepin County in the Twin Cities Metro. The area also sends workers to the Twin Cities, represented by Hennepin and Ramsey County, as well as to Douglas County (Figure 10). The average commute time for workers the region was 17.1 minutes, compared to 23.5 minutes for workers statewide. Almost 70% of workers commuted less

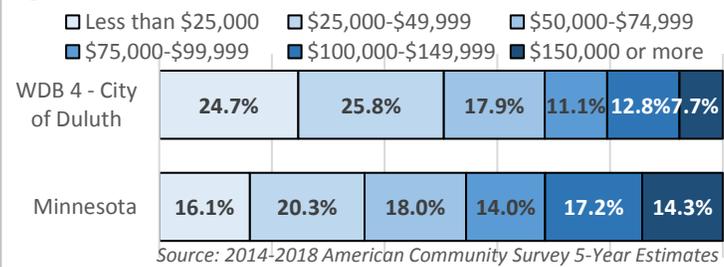
than 20 minutes each way, compared to 46.0% statewide. About 3.9% of workers worked at home, and 5.8% were able to walk to work. About half (46.2%) of workers left home between 6:00 a.m. and 8:00 a.m.

## INCOMES, WAGES AND OCCUPATIONS

### HOUSEHOLD INCOMES

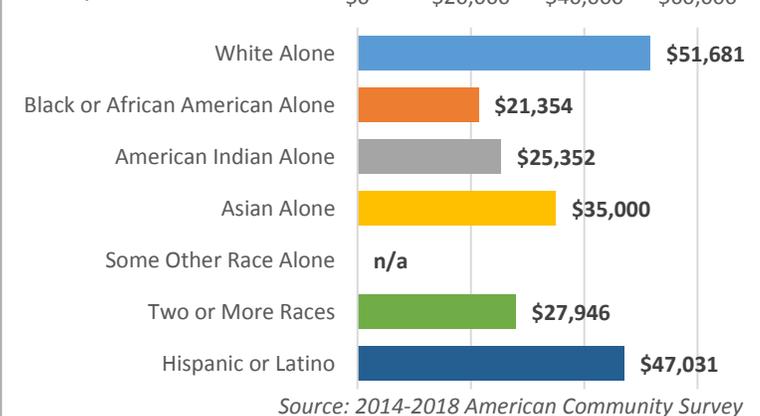
Household incomes were significantly lower in Local Area 4 than the rest of the state. The median household was \$49,441 in 2018, compared to \$68,411 in Minnesota. Over half (50.5%) of the households in the city had incomes below \$50,000 in 2018, compared to 36.4% of households statewide. Only 7.7% of households had incomes greater than \$150,000 in the region (Figure 11).

Figure 11. Household Incomes, 2018



Disparities in economic outcomes extended to income as well. Median household incomes for households of color were universally lower than for White households. Black or African American households reported the lowest incomes in Local Area 4, with a median income that was over \$30,000 lower than White households. American Indian and Two or More Races households also reported much lower median incomes. Hispanic or Latino households reported a median income nearer to that of White households. Sample sizes were small for several of the other race groups, leading to large margins of error and big swings compared to previous years (Figure 12).

Figure 12. Median Household Income by Race in Duluth, 2018



**COST OF LIVING**

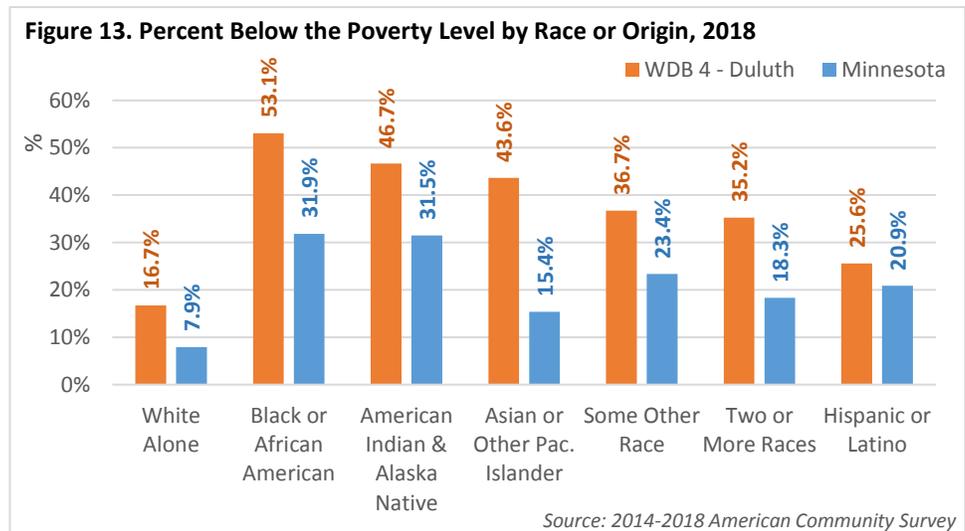
According to DEED’s [Cost of Living tool](#), the basic needs budget for an average Minnesota family (which consists of 2 adults and 1 child, with 1 full-time and 1 part-time worker) was \$56,772 in 2019. The cost of living for a similar family in St. Louis County was \$51,084. The highest monthly costs were for housing, food, and transportation; though the region’s housing, child care, and taxes were significantly lower than the rest of the state. In order to meet the basic needs cost of living for the region, the two workers in the family scenario described would need to earn \$16.37 per hour working a combined 60 hours per week.

DEED’s Cost of Living tool provides different estimates for household compositions including single people, partnered couples, and up to 4 children. For a single person living alone and working full-time, the estimated yearly cost in St. Louis County would be \$28,860, which would require an hourly wage of \$13.88 to meet the basic needs standard of living (Table 8).

Table 8. Family Yearly Cost, Worker Hourly Wage, and Family Monthly Costs, 2019										
Family Composition	Number of Workers	Yearly Cost of Living	Hourly Wage Required	Monthly Costs						
				Child Care	Food	Health Care	Housing	Transportation	Other	Taxes
<b>St. Louis County</b>										
Single, 0 children	1 FT	\$28,860	\$13.88	\$0	\$330	\$166	\$676	\$633	\$282	\$318
Single, 1 child	1 FT	\$44,724	\$21.50	\$639	\$489	\$385	\$887	\$637	\$386	\$304
<b>2 parents, 1 child</b>	<b>1 FT, 1 PT</b>	<b>\$51,084</b>	<b>\$16.37</b>	<b>\$320</b>	<b>\$756</b>	<b>\$659</b>	<b>\$887</b>	<b>\$730</b>	<b>\$460</b>	<b>\$445</b>
2 parents, 2 children	2 FT	\$71,916	\$17.29	\$1,157	\$988	\$668	\$1,141	\$767	\$597	\$675
<b>State of Minnesota</b>										
Single, 0 children	1 FT	\$31,392	\$15.09	\$0	\$336	\$157	\$798	\$653	\$318	\$354
<b>2 parents, 1 child</b>	<b>1 FT, 1 PT</b>	<b>\$56,772</b>	<b>\$18.20</b>	<b>\$516</b>	<b>\$769</b>	<b>\$593</b>	<b>\$1,033</b>	<b>\$755</b>	<b>\$505</b>	<b>\$560</b>

Source: [DEED Cost of Living tool](#)

Overall, Local Area 4’s poverty rate was 19.3%, which was well above the statewide rate of 10.5%. Like incomes, there are disparities between Whites and people of color by poverty rate. It was estimated that 53.1% of the city’s Black or African American population was below the poverty level in 2018, compared to an already high 16.7% of the White population. Likewise, poverty levels hovered near 47% for American Indians, 44% for Asians, 37% for people of Some Other Race, and 36% for people of Two or More Races. More than a quarter of people of Hispanic or Latino origin were also below the poverty level in 2018. In every case, the region’s poverty rate was higher than the state’s poverty rate (Figure 13).



## WAGES AND OCCUPATIONS

According to DEED's [Occupational Employment Statistics](#) program, the median hourly wage for all occupations in Northeast Minnesota was \$19.03 in the first quarter of 2019, which was the third lowest wage level of the six planning regions in the state. Northeast's median wage was \$2.46 below the state's median hourly wage, equaling 88.6% of the statewide wage rate, and \$4.27 below the median hourly wage in the Twin Cities metro area, which would amount to nearly \$9,000 per year for a full-time worker (Table 9).

Region	Median Hourly Wage	Estimated Regional Employment
Central Minnesota	\$19.28	278,730
<b>Northeast Minnesota</b>	<b>\$19.03</b>	<b>144,320</b>
Northwest Minnesota	\$18.38	223,440
Southeast Minnesota	\$19.89	242,490
Southwest Minnesota	\$18.38	176,420
Twin Cities Metro Area	\$23.30	1,805,980
<b>State of Minnesota</b>	<b>\$21.49</b>	<b>2,880,650</b>

Source: [DEED Occupational Employment Statistics](#)

Based on location quotient, Northeast Minnesota stands out for having higher concentrations of Community and Social Service, Forestry, Construction, Protective Support, Healthcare Support, Installation, Maintenance, and Healthcare Practitioner workers than the state. The largest occupations in the region include Office and Administrative Support, Food Preparation and Serving, Sales and Related, and Healthcare Practitioner positions (Table 10).

Not surprisingly, the lowest-paying jobs are concentrated in Food Prep and Serving, Sales and Related, Healthcare Support, Personal Care, Building, and Grounds Cleaning and Maintenance which tend to have lower educational and training requirements. For the most part, the gap in pay between Northeast Minnesota and the state is also much lower in these jobs (Table 10).

	Northeast Minnesota				State of Minnesota		
	Median Hourly Wage	Estimated Regional Employment	Share of Total Employment	Location Quotient	Median Hourly Wage	Estimated Regional Employment	Share of Total Employment
<b>Total, All Occupations</b>	<b>\$19.03</b>	<b>144,320</b>	<b>100.0%</b>	<b>1.0</b>	<b>\$21.49</b>	<b>2,880,650</b>	<b>100.0%</b>
Office & Administrative Support	\$18.02	17,750	12.3%	1.0	\$20.03	363,800	12.6%
Food Preparation & Serving Related	\$11.95	15,270	10.6%	1.2	\$12.43	244,300	8.5%
Sales & Related	\$12.77	13,640	9.5%	1.0	\$15.37	277,000	9.6%
Healthcare Practitioners & Technical	\$31.08	11,950	8.3%	1.3	\$36.07	190,800	6.6%
Healthcare Support	\$14.26	11,020	7.6%	1.3	\$14.81	163,160	5.7%
Transportation & Material Moving	\$17.27	8,840	6.1%	0.8	\$18.06	216,890	7.5%
Education, Training & Library	\$24.48	8,160	5.7%	1.0	\$24.38	165,310	5.7%
Production	\$20.37	7,250	5.0%	0.7	\$19.03	212,650	7.4%
Construction & Extraction	\$28.03	7,180	5.0%	1.4	\$28.97	104,900	3.6%
Management	\$41.52	6,680	4.6%	0.8	\$52.70	170,650	5.9%
Installation, Maintenance & Repair	\$25.29	6,500	4.5%	1.3	\$24.31	100,060	3.5%
Building, Grounds Cleaning & Maint.	\$14.63	5,260	3.6%	1.3	\$15.23	83,860	2.9%
Business & Financial Operations	\$29.24	5,190	3.6%	0.6	\$33.87	171,550	6.0%
Community & Social Service	\$21.01	4,970	3.4%	1.7	\$23.34	57,200	2.0%
Personal Care & Service	\$14.42	3,520	2.4%	1.0	\$13.65	70,290	2.4%
Protective Service	\$24.96	3,080	2.1%	1.4	\$22.45	45,030	1.6%
Architecture & Engineering	\$35.05	2,310	1.6%	0.8	\$38.00	55,520	1.9%
Computer & Mathematical	\$33.91	1,910	1.3%	0.4	\$42.71	97,960	3.4%
Life, Physical & Social Science	\$31.36	1,510	1.0%	1.1	\$34.35	27,070	0.9%
Arts, Design, Entertainment & Media	\$18.49	1,500	1.0%	0.8	\$24.52	38,540	1.3%
Legal	\$34.59	500	0.3%	0.5	\$37.35	20,050	0.7%
Farming, Fishing & Forestry	\$21.55	320	0.2%	1.6	\$17.72	4,060	0.1%

Source: [DEED Occupational Employment Statistics, Qtr. 1 2020](#)

In contrast, the highest paying jobs are found in Management, Architecture and Engineering, Legal, Computer and Mathematical, Life, Physical, and Social Science, Healthcare Practitioners, and Business and Financial Operations occupations, which all need higher levels of education and experience, including many that require postsecondary training. The pay gaps between the region and state are much bigger in these occupations often exceeding \$4.00 per hour – or more than \$8,000 per year for a full-time worker.

### JOB VACANCY SURVEY

Employers in Northeast Minnesota reported 8,275 job vacancies in the fourth quarter of 2019, the second highest number ever posted and a 2% increase compared to the prior year. Demand for workers was high across all industries, with the largest number of openings in retail trade (2,371 job vacancies), health and social assistance (2,126 vacancies), Accommodation and food service (1,207 vacancies), administrative and waste services (521 vacancies) and educational services (429 vacancies).

Rising demand has led to rising wages, with the median hourly wage offer from the current survey jumping to \$14.11 per hour, which was the highest 2nd or 4th quarter result. Wage offers ranged from under \$12 per hour for personal care, food preparation and serving, and sales and related occupations to around \$25 per hour for, healthcare practitioners, management, and architect and engineering occupations. Life, physical and social sciences and computer and mathematical occupations had median offers near \$30 per hour.

The largest number of vacancies were in healthcare, sales and related, food preparation and serving, and office and administrative occupations. More than half of regional vacancies were in these occupational groups. Overall, 52 percent of the openings were part-time, 30 percent required post-secondary education, and 34 percent required 1 or more years of experience (Table 11). In sum, educational requirements in the region had been stable or declining over the past 5 years, while work experience requirements were relatively stable.

**Table 11. Northeast Minnesota Job Vacancy Survey Results, 4<sup>th</sup> Qtr. 2019**

	Number of Total Vacancies	Percent Part-time	Percent Temporary or Seasonal	Requiring Post-Secondary Education	Requiring 1 or More Years of Experience	Requiring Certificate or License	Median Hourly Wage Offer	Job Vacancy Rate
<b>Total, All Occupations</b>	<b>8,275</b>	<b>52%</b>	<b>10%</b>	<b>30%</b>	<b>34%</b>	<b>46%</b>	<b>\$14.13</b>	5.8
Sales & Related	1,383	39%	15%	13%	21%	5%	\$11.90	10.1
Healthcare Practitioners & Technical	1,225	63%	2%	92%	35%	99%	\$24.50	10.6
Food Preparation & Serving Related	1,069	67%	4%	1%	20%	13%	\$11.66	7.1
Office & Administrative Support	716	59%	16%	18%	38%	7%	\$13.33	3.5
Transportation & Material Moving	700	64%	18%	3%	32%	97%	\$12.12	9.7
Personal Care & Service	618	61%	15%	2%	6%	50%	\$11.81	8.0
Building, Grounds Cleaning & Maint.	513	85%	10%	0%	3%	3%	\$14.91	9.5
Healthcare Support	347	58%	1%	43%	7%	86%	\$14.25	5.3
Community & Social Service	303	17%	1%	22%	57%	67%	\$14.19	5.9
Education, Training & Library	297	55%	52%	87%	86%	90%	\$17.05	3.6
Construction & Extraction	255	0%	0%	7%	100%	92%	\$21.86	4.1
Computer & Mathematical	153	51%	0%	39%	96%	8%	\$31.38	8.4
Architecture & Engineering	151	0%	0%	99%	99%	81%	\$26.45	6.9
Management	136	0%	0%	60%	98%	22%	\$25.28	1.9
Business & Financial Operations	75	17%	1%	50%	62%	24%	\$19.74	1.5
Arts, Design, Entertainment & Media	74	51%	15%	14%	55%	19%	\$18.97	5.8
Production	71	6%	0%	13%	36%	10%	\$16.64	1.0
Installation, Maintenance & Repair	60	31%	1%	42%	58%	38%	\$18.96	0.9
Protective Service	59	49%	12%	19%	27%	77%	\$14.13	2.0
Life, Physical & Social Sciences	23	9%	0%	95%	81%	77%	\$28.17	1.4

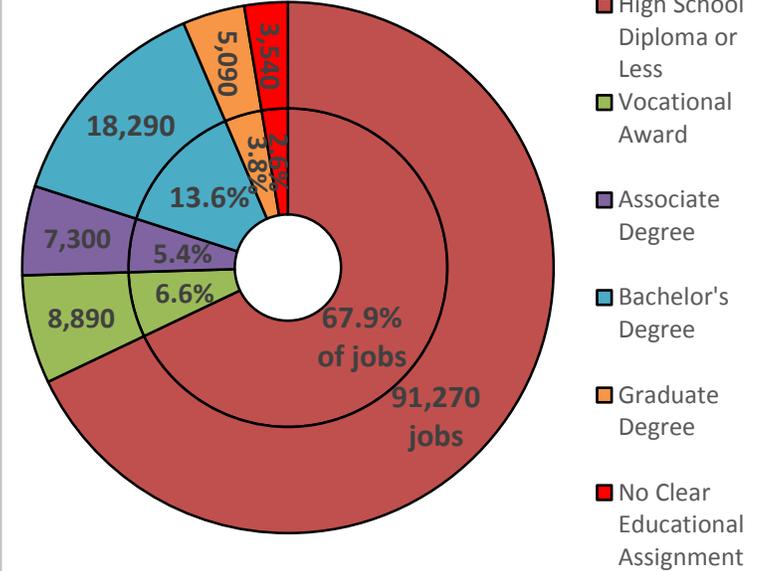
Source: DEED Job Vacancy Survey, 4<sup>th</sup> Qtr. 2019

### EDUCATIONAL REQUIREMENTS

Despite the recent job vacancy data, DEED’s Occupational Employment Statistics program shows that only around one-third of current jobs held in the region require post-secondary education to enter. The other two-thirds require no more than a high school diploma, and sometimes less. However, some amount of on-the-job training is often needed (Figure 14).

Certain careers – such as dentists, lawyers, and teachers – require a college education, while other jobs – including cost estimators, sales representatives, and correctional officers – do not. College is an excellent way to move up career ladders and open windows of opportunity to fields that would otherwise be closed, such as nursing or engineering. Many of these occupations offer high wages and are in high demand in the marketplace. While education is typically a worthwhile investment, college can be expensive – with average annual expenses ranging between \$14,500 and almost \$50,000 per year in Minnesota. For those who go to college, choice of major matters – different programs lead to different jobs that earn different amounts of money.

**Figure 14. Northeast Minnesota Share of Jobs by Educational Requirements, 2019**



### EMPLOYMENT PROJECTIONS

Overall, the Northeast planning area is projected to grow 1.1% from 2016 to 2026, a gain of 1,725 new jobs. In addition, the region is also expected to need 179,072 replacement openings to fill jobs left vacant by retirements and other career changers. Health care practitioners and support, personal care and service, building grounds cleaning and maintenance, community and social service, installation, maintenance and repair and food preparation and serving related occupations are expected to see the most new growth. Production, office and administration support, and sales occupations are expected to decline but every occupational group will show some future demand through replacement openings (Figure 15).

**Figure 15. Northeast Minnesota Employment Projections, 2016-2026**



## OCCUPATIONS IN DEMAND

According to DEED's [Occupations in Demand](#) tool, there are nearly 500 occupations in demand (OID) in Northeast Minnesota, and nearly 300 occupations are showing relatively high demand. Training and education requirements of these occupations range from short-term on-the-job training to postsecondary education and advanced degrees. Most OID require a high school diploma or less, and less than one-third require a bachelor's degree or higher. While OID exist in every sector, the region's major industries are well represented as many of the jobs are concentrated in health care, accommodation and food service, transportation, and other related industries (Table 12).

Less than High School	High School or Equivalent	Some College or Assoc. Degree	Bachelor's Degree or Higher
Personal Care Aides (\$26,458)	Social & Human Service Assistants (\$34,786)	Registered Nurses (\$66,583)	Elementary School Teachers (\$72,265)
Maids & Housekeeping Cleaners (\$28,945)	Heavy & Tractor-Trailer Truck Drivers (\$50,180)	Nursing Assistants (\$32,440)	Accountants & Auditors (\$63,413)
Retail Salespersons (\$25,240)	First-Line Supervisors of Food Prep & Serv. Workers (\$31,815)	Licensed Practical & Licensed Vocational Nurses (\$45,331)	Secondary School Teachers (\$57,502)
Combined Food Prep. & Serving (\$24,025)	First-Line Supervisors of Retail Sales Workers (\$38,482)	Machinists (\$50,926)	Nurse Practitioners (\$117,194)
Cashiers (\$24,098)	Office Clerks, General (\$34,738)	Hairdressers, Hairstylists, & Cosmetologists (\$26,668)	Medical & Health Services Manager (\$93,410)
Cooks, Restaurants (\$29,040)	Teacher Assistants (\$31,632)	Automotive Service Technicians & Mechanics (\$45,930)	Market Research Analysts & Marketing Spec. (\$53,625)
Janitors & Cleaners (\$31,307)	Maintenance & Repair Workers, General (\$42,446)	Emergency Medical Technicians & Paramedics (\$37,294)	Child, Family, & School Social Workers (\$53,625)
Waiters & Waitresses (\$21,867)	Secretaries & Administrative Assistants (\$40,689)	Industrial Machinery Mechanics (\$60,061)	Family & General Practitioners (\$211,040)
Stock Clerks & Order Fillers (\$25,761)	Pharmacy Technicians (\$36,308)	Radiologic Technologists (\$65,455)	Internists, General (N/A)
Home Health Aides (\$27,598)	Light Truck or Delivery Service Drivers (\$36,324)	Electrical & Electronics Engineering Tech. (\$69,548)	Physical Therapists (\$84,748)

Source: [DEED Occupations in Demand](#)

## ECONOMY

### INDUSTRY EMPLOYMENT

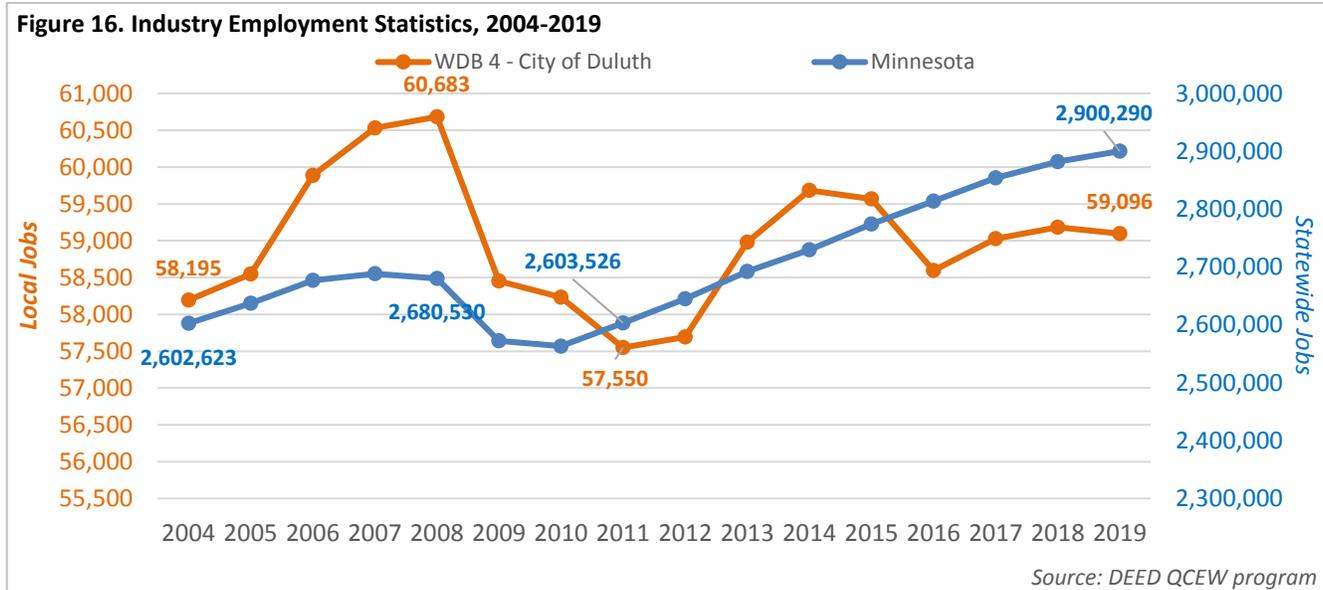
According to DEED's [Quarterly Census of Employment & Wages \(QCEW\) program](#), Local Area 4 was home to 2,466 business establishments providing 59,096 covered jobs through 2019, with a total payroll that exceeded \$3 billion. That was about 1.8% of total employment in the state of Minnesota. Average annual wages were \$51,012 in the city, which was up from \$48,914 but \$8,500 lower than the statewide average wage (Table 13).

Geography	Number of Firms	Number of Jobs	Total Payroll	Average Annual Wage	2014-2019		2018-2019	
					Change in Jobs	Percent Change	Change in Jobs	Percent Change
<b>WDB 4 - City of Duluth</b>	<b>2,466</b>	<b>59,096</b>	<b>\$3,014,589,440</b>	<b>\$51,012</b>	<b>-590</b>	<b>-1.0%</b>	<b>-86</b>	<b>-0.1%</b>
Northeast Minnesota	8,846	143,638	\$6,488,391,239	\$45,172	+3,317	+2.4%	+276	+0.2%
<b>State of Minnesota</b>	<b>178,242</b>	<b>2,900,290</b>	<b>\$172,936,995,226</b>	<b>\$59,627</b>	<b>+170,677</b>	<b>+6.3%</b>	<b>+18,383</b>	<b>+0.6%</b>

Source: [DEED Quarterly Census of Employment & Wages \(QCEW\)](#)

Not including the city of Duluth, St. Louis County is the largest employment center in the region with 39,245 jobs at 2,879 firms; followed by Itasca County and Carlton County with 16,222 and 13,181 jobs, respectively. The city of Duluth has lost 590 jobs since 2014, a 1.0% decrease, including a loss of 86 jobs in the last year. By comparison, employment in the Northeast region grew 2.4% since 2014. (Table 13).

Local Area 4 saw a period of recovery following the Great Recession and has regained about half of the jobs that were lost since 2009, but employment growth has slowed in recent years. In sum, the city lost 3,133 jobs due to the recession but has gained 1,546 jobs since 2009. Duluth has recovered more slowly than the state, which gained jobs at a 6.3% clip from 2014 to 2019, compared to a 1.0% decrease in the city (Figure 16).



With 19,123 jobs at 334 firms, Health Care and Social Assistance is the largest employing industry in Local Area 4, accounting for 32.4% of total jobs in the region. That is more than 15 percentage points higher than the state’s concentration of employment in the health care industry. The amount of jobs in this industry has increased by 1,461 jobs since 2014, including 150 jobs in the previous year. At \$59,308 in 2019, average annual wage was over \$8,000 higher in Health Care than all industries.

The next largest industries were Accommodation and Food Services and Retail Trade which combined to make up over 20% of all the jobs in the region, even though Retail Trade employment declined 9% since 2014. Over the same period Accommodation and Food Services added jobs. However, the average annual wages were low in both industries, with retail trade at \$26,759 and accommodation and food services at \$18,130 (Table 14).

As the county seat and employment center of the county, Educational Services and Public Administration were highly concentrated in the city of Duluth, combining to provide 14.4% of total jobs. However, both industries, particularly Education, saw considerable declines over time due to tight budgets and changing services. In contrast, the Manufacturing, Transportation and Warehousing and Other Services industries saw strong gains from 2014 to 2019 with the former adding over 650 jobs during that time, an increase over 25%. The average annual wages for Manufacturing and Transportation and Warehousing were more than \$12,000 higher than the average for all jobs in the city. In sum, 8 of the 18 main industries in the area added jobs since 2014 as overall employment fell 1.0% while 9 of the 18 industries gained jobs in the past year, when the city shrank 0.1% overall (Table 14).

**Table 14. WDB 4 - Duluth Industry Employment Statistics, 2019**

WDB 4 - Duluth  NAICS Industry Title	2019 Annual Data				2014-2019		2018-2019	
	Number of Firms	Number of Jobs	Total Payroll (\$1,000s)	Avg. Annual Wage	Change in Jobs	Percent Change	Change in Jobs	Percent Change
<b>Total, All Industries</b>	<b>2,466</b>	<b>59,096</b>	<b>\$3,014,589</b>	<b>\$51,012</b>	<b>-590</b>	<b>-1.0%</b>	<b>-86</b>	<b>-0.1%</b>
Health Care & Social Assistance	334	19,123	\$1,134,147	\$59,308	+1,461	+8.3%	+150	+0.8%
Accommodation & Food Services	252	6,127	\$111,081	\$18,130	+94	+1.6%	-53	-0.9%
Retail Trade	390	5,851	\$156,570	\$26,759	-566	-8.8%	-267	-4.4%
Educational Services	68	4,832	\$249,450	\$51,625	-382	-7.3%	-88	-1.8%
Public Administration	56	3,650	\$238,493	\$65,341	-17	-0.5%	+80	+2.2%
Manufacturing	89	3,259	\$206,195	\$63,269	+672	+26.0%	+139	+4.5%
Professional & Technical Services	239	2,797	\$192,931	\$68,978	+125	+4.7%	+90	+3.3%
Construction	127	2,407	\$128,319	\$53,311	+172	+7.7%	+369	+18.1%
Other Services	266	2,151	\$59,212	\$27,527	+108	+5.3%	+7	+0.3%
Finance & Insurance	149	1,656	\$115,354	\$69,658	-551	-25.0%	-84	-4.8%
Transportation & Warehousing	62	1,557	\$108,540	\$69,711	+168	+12.1%	+180	+13.1%
Admin. Support & Waste Mgmt. Svcs.	76	1,279	\$40,454	\$31,629	-705	-35.5%	-122	-8.7%
Arts, Entertainment, & Recreation	80	1,053	\$22,696	\$21,554	-139	-11.7%	+39	+3.8%
Wholesale Trade	80	1,013	\$60,031	\$59,261	-221	-17.9%	-42	-4.0%
Information	43	775	\$40,827	\$52,680	-203	-20.8%	-49	-5.9%
Real Estate & Rental & Leasing	117	756	\$28,118	\$37,193	+3	+0.4%	-38	-4.8%
Utilities	7	660	\$75,619	\$114,575	-117	-15.1%	-57	-7.9%
Management of Companies	22	476	\$42,474	\$89,231	-131	-21.6%	+4	+0.8%

Source: DEED Quarterly Census of Employment & Wages (QCEW) program

## INDUSTRY EMPLOYMENT

According to DEED's Quarterly Employment Demographics (QED) program, the workforce in St. Louis County was aging over the past 10 years. Nearly one-quarter (22.3%) of workers in the region were 55 years or older, compared to 21.7% statewide and just 17.8% in the county one decade earlier. In contrast, the percentage of workers under 25 was falling. Wages increased the most for workers under 20 and over 64 years of age (Table 15).

As implied above, wages were climbing across the board for all workers due to rising demand and a tight labor market. While wages were still lowest for the youngest and oldest workers who tend to fill lower-skilled, less-than-fulltime jobs in industries like retail trade and accommodation and food services, these two age groups enjoyed percentage increases in wages over 39% from 2009 to 2019. Wages were highest for workers between 45 and 64 years of age. In 2009, women made a median wage 78.9% that of men and grew only slightly to 80.3% in 2019. Males worked more hours than females, though that gap was narrowing as well (Table 15).

**Table 15. Workforce Demographics by Age Group and Gender, Total of All Industries, 2009-2019**

St. Louis Co.	Percentage of Workers		Percent of Workers, Minnesota		Median Hourly Wage		Median Hours Worked (Per Qtr.)	
	2019	2009	2019	2009	2019	2009	2019	2009
<b>Total, all ages</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>\$19.24</b>	<b>\$14.94</b>	<b>403</b>	<b>397</b>
19 years & under	6.4%	6.6%	6.6%	6.5%	\$10.92	\$7.59	100	130
20 to 24 years	12.6%	13.5%	10.4%	11.1%	\$13.27	\$9.97	198	233
25 to 44 years	40.9%	38.1%	42.8%	42.7%	\$21.63	\$16.25	461	435
45 to 54 years	17.8%	23.9%	18.6%	23.0%	\$25.54	\$19.37	480	478
55 to 64 years	17.4%	15.0%	16.7%	13.5%	\$23.70	\$19.42	476	455
65 years & over	4.9%	2.8%	5.0%	3.3%	\$16.07	\$11.54	235	207
Male	50.0%	49.5%	49.3%	48.5%	\$22.19	\$17.10	458	437
Female	50.0%	50.5%	50.7%	51.5%	\$17.81	\$13.50	368	364

Source: DEED Quarterly Employment Demographics

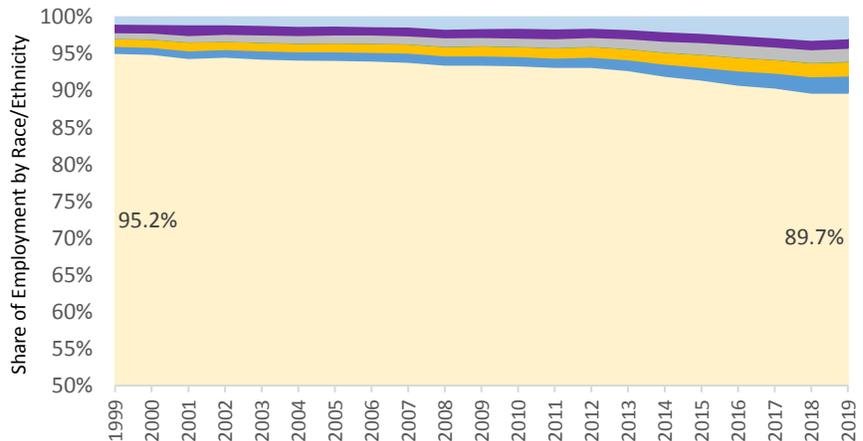
**EMPLOYMENT DIVERSITY**

People of color make up 10.2% of the population and held 10.3% of total jobs in Duluth, according to data from the Quarterly Workforce Indicators (QWI) program. In 2019, that equaled an average of 6,694 workers of color, compared to 58,533 white workers. However, workers of color held only 4.8% of total jobs in the city in 1999, meaning the people of color employment share more than doubled in the last 20 years (Figures 17 and 18).

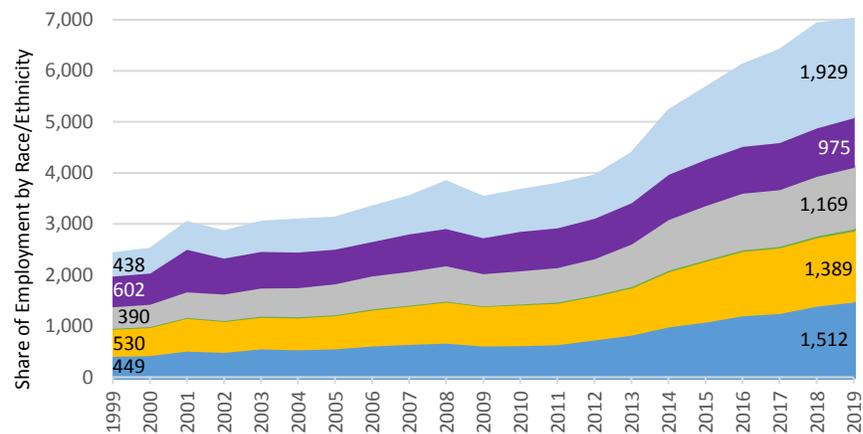
Workers of color have filled 25.4% of new jobs added since 2009. With 1,929 jobs, Black or African Americans were the largest workers of color group in the city’s economy, growing 145% since 2009. The next largest group was Hispanic or Latinos, who held 1,512 jobs in 2019, also more than doubling from 2009. The number of Asian workers grew 95% from 2009 to 1,169 in 2019. Finally, American Indians held 975 jobs in 2019, a 38.4% increase from 2009 (see Figure 18).

Most sectors in Duluth are non-diverse, but there are a couple of industries that rely more on workers of color. For example, 11.1% of Agriculture, Forestry, Fishing, and Hunting workers are American Indian. Similarly, 14% of arts, entertainment, and recreation, 16.9% of Accommodation and Food Services, and 14.9% of the jobs in Transportation and Warehousing were held by workers of color. The largest number of BIPOC workers were employed in Health care and Social Assistance, Transportation and Warehousing, and Accommodation and Food Service (see Figure 19).

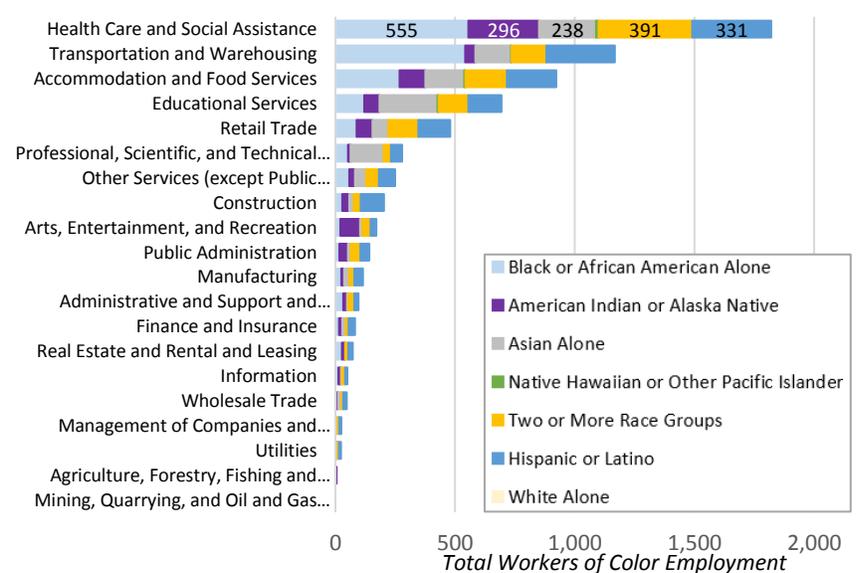
**Figure 17. Employment by Race and Ethnicity, All Industries, Duluth, 1999-2019**



**Figure 18. Employment of People of Color, All Industries, Duluth, 1999-2019**



**Figure 19. People of Color Employment by Industry, Duluth, Minnesota, 2019**



Source: DEED, Census LEHD Quarterly Workforce Indicators

**INDUSTRY PROJECTIONS**

The Northeast Minnesota planning region is projected to grow 1.1% from 2016 to 2026, a gain of only 1,725 new jobs. The largest and third-fastest growing industry is expected to be Health Care and Social Assistance, which may account for more than double of the total projected growth in the region by 2026. The region is also expected to see significant employment growth in Accommodation and Food Services, Other Services, Finance and Insurance, Professional and Technical Services, and Mining. In contrast, Retail Trade is expected to cut 1,750 jobs in the next decade, and Manufacturing is also expected to see cuts (Table 16).

**Table 16. Northeast Minnesota Industry Projections, 2016-2026**

Industry	Estimated Employment 2016	Projected Employment 2026	Percent Change 2016-2026	Numeric Change 2016-2026
Total, All Industries	160,337	162,062	+1.1%	+1,725
Health Care & Social Assistance	32,797	36,322	+10.7%	+3,525
Retail Trade	17,625	15,875	-9.9%	-1,750
Public Administration	14,724	14,358	-2.5%	-366
Accommodation & Food Services	14,654	15,094	+3.0%	+440
Educational Services	12,988	13,044	+0.4%	+56
Manufacturing	8,473	7,725	-8.8%	-748
Other Services, Ex. Public Admin	6,845	7,093	+3.6%	+248
Construction	6,380	6,068	-4.9%	-312
Finance & Insurance	4,954	5,069	+2.3%	+115
Transportation & Warehousing	4,727	4,528	-4.2%	-199
Professional & Technical Services	4,365	4,944	+13.3%	+579
Mining	3,610	4,044	+12.0%	+434
Administrative & Waste Services	3,602	3,776	+4.8%	+174
Arts, Entertainment, & Recreation	3,522	3,680	+4.5%	+158
Wholesale Trade	3,278	2,931	-10.6%	-347
Agriculture, Forestry, Fish & Hunt	1,875	1,694	-9.7%	-181
Information	1,589	1,343	-15.5%	-246
Utilities	1,489	1,440	-3.3%	-49
Real Estate & Rental & Leasing	1,332	1,435	+7.7%	+103
Management of Companies	828	821	-0.8%	-7

Source: [DEED 2016-2026 Employment Outlook](#)

**NONEMPLOYER ESTABLISHMENTS**

Local Area 4 was home to 5,804 self-employed businesses or “nonemployers” in 2018, which are defined by the U.S. Census Bureau as “businesses without paid employees that are subject to federal income tax, originating from tax return information of the Internal Revenue Service (IRS).” Unlike covered employment, Duluth saw a steady decline in nonemployers over the past decade, responding to economic changes. In sum, the city lost 263 nonemployers from 2007 to 2018, a -4.3% decrease. In Northeast Minnesota, there were about 20,466 nonemployers in 2018, a decline of more than 1,700 self-employed people since 2007. These non-employers generated sales receipts of over \$812 million in 2018 (Table 17).

**Table 17. Nonemployer Statistics, 2018**

	2018		2007-2018	
	Number of Firms	Receipts (\$1,000s)	Change in Firms	Percent Change
<b>WDB 4 - City of Duluth</b>	<b>5,804</b>	<b>\$231,789</b>	<b>-263</b>	<b>-4.3%</b>
St. Louis Co.	12,014	\$479,776	-544	-4.3%
Northeast MN	20,466	\$812,846	-1,709	-7.7%
<b>Minnesota</b>	<b>416,487</b>	<b>\$19,994,802</b>	<b>+29,503</b>	<b>+7.6%</b>

Source: [U.S. Census, Nonemployer Statistics program](#)

**CENSUS OF AGRICULTURE**

Unlike other parts of Greater Minnesota, agriculture is not a key industry in Northeast Minnesota, but there are 2,362 farms producing just over \$55 million in the market value of products sold in 2017 according to the U.S. Department of Agriculture. All of the counties in the planning region rank near the bottom in Minnesota in regards to the market value of products sold (Table 18).

**Table 18. Census of Agriculture, 2017**

	Number of Farms	Market Value of Products Sold	State Rank
St. Louis Co.	779	\$16,139,000	80
<b>Northeast MN</b>	<b>2,362</b>	<b>\$55,215,000</b>	<b>6</b>
<b>Minnesota</b>	<b>68,822</b>	<b>\$18,395,390,000</b>	

Source: [2017 Census of Agriculture](#)

Upon request, this information can be made available in alternate formats for people with disabilities by contacting Carson Gorecki at (218) 302-8413 or at [carson.gorecki@state.mn.us](mailto:carson.gorecki@state.mn.us).